What is claimed is:

1. A method of cardioscopy, comprising:

creating a primary heart bypass circuit for perfusing an organism; creating a secondary circuit for perfusing the heart of the organism with a non-

observation-impairing pumping medium; and observing the heart through the secondary circuit.

- 2. The method of claim 1, further comprising allowing the heart to continue beating.
- 3. The method of claim 1, wherein the pumping medium is oxygenatable.
- 4. The method of claim 1, wherein the organism is perfused with blood.
- 5. The method of claim 1, wherein creating the primary heart bypass circuit includes receiving blood from a vena cava and returning blood to the aorta.
- 6. The method of claim 1, wherein creating the primary heart bypass circuit includes perfusing a coronary blood vessel.
- 7. The method of claim 1, wherein the secondary circuit is fluidically isolated from the primary heart bypass circuit.
- 8. The method of claim 1, wherein creating the second circuit includes continuously perfusing the heart.
- 9. The method of claim 1, wherein creating the secondary circuit includes perfusing a chamber of the heart.
- 10. The method of claim 1, wherein creating the secondary circuit includes perfusing a coronary blood vessel.

11. The method of claim 1, wherein creating the secondary circuit includes receiving the pumping medium from the aorta and returning the pumping medium to a vena cava.

- 12. The method of claim 1, wherein the pumping medium is optically clear.
- 13. The method of claim 12, wherein the optically clear pumping medium is oxygenatable.
- 14. The method of claim 1, wherein the pumping medium is translucent.
- 15. The method of claim 1, wherein the pumping medium is non-turbid.
- 16. The method of claim 1, wherein the pumping medium includes a fluorocarbon.
- 17. The method of claim 16, wherein the fluorocarbon is perflurocarbon.
- 18. The method of claim 1, wherein observing includes visualizing the heart through a catheter.
- 19. The method of claim 1, wherein observing includes visualizing with an angioscope.
- 20. The method of claim 1, wherein observing includes visualizing with an endoscope.
- 21. The method of claim 1, wherein observing includes observing a heart chamber.
- 22. The method of claim 1, wherein observing includes observing a heart valve.
- 23. The method of claim 1, further comprising performing an intracardiac procedure.
- 24. A cardioscopy apparatus, comprising:
 - a primary heart bypass circuit for perfusing an organism;
 - a secondary circuit for perfusing the heart of the organism with a nonobservation-impairing pumping medium; and

- an observation device for observing the heart through the secondary circuit.
- 25. The apparatus of claim 24, wherein the pumping medium is oxygenatable.
- 26. The apparatus of claim 24, wherein the organism is perfused with blood.
- 27. The apparatus of claim 24, wherein the primary heart bypass circuit receives blood from a vena cava and returns blood to the aorta.
- 28. The apparatus of claim 24, wherein the primary heart bypass circuit perfuses a coronary blood vessel.
- 29. The apparatus of claim 24, wherein the secondary circuit is fluidically isolated from the primary heart bypass circuit.
- 30. The apparatus of claim 24, wherein the second circuit continuously perfuses the heart.
- 31. The apparatus of claim 24, wherein the secondary circuit perfuses a chamber of the heart.
- 32. The apparatus of claim 24, wherein the secondary circuit perfuses a coronary blood vessel.
- 33. The apparatus of claim 24, wherein the secondary circuit receives the pumping medium from the aorta and returns the pumping medium to a vena cava.
- 34. The apparatus of claim 24, wherein the pumping medium is optically clear.
- 35. The apparatus of claim 34, wherein the optically clear pumping medium is oxygenatable.
- 36. The apparatus of claim 24, wherein the pumping medium is translucent.
- 37. The apparatus of claim 24, wherein the pumping medium is non-turbid.
- 38. The apparatus of claim 24, wherein the pumping medium includes a fluorocarbon.

39. The apparatus of claim 38, wherein the fluorocarbon is perfluorocarbon.

- 40. The apparatus of claim 24, wherein the observation device comprises an intracardiac visualization device.
- 41. The apparatus of claim 24, wherein the observation device comprises a catheter.
- 42. The apparatus of claim 24, wherein the observation device comprises an angioscope.
- 43. The apparatus of claim 24, wherein the observation device comprises an endoscope.
- 44. The apparatus of claim 24, further comprising an intracardiac procedure device.

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